

 Eskom National Transmission Company South Africa TM	Scope of Work	NTCSA
---	----------------------	--------------

Title: **Scope of Works for Supply and Delivery of Plastic Bird Diverters & Stainless-Steel Straps for NTCSA Central Grid** Document Identifier: **N/A**

Alternative Reference Number: **N/A**

Area of Applicability: **National Transmission Company South Africa SOC Ltd**

Functional Area: **Engineering**

Revision: **0**

Total Pages: **8**

Next Review Date: **N/A**

Disclosure Classification: **Controlled Disclosure**

Compiled by

Rethabile Mzizi



Initials and Surname

Engineer Lines & Servitudes

Date: 03/09/2024

Functional Responsibility

Nathan Molapo



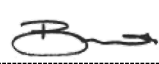
Initials and Surname

Senior Supervisor Lines & Servitudes

Date: 29.08.2024

Authorized by

M Nyalunga



Initials and Surname

Middle Manager Lines & Servitudes

Date: 03/09/2024

Content

1. Introduction..... 3

2. Scope of Work..... 3

 2.1 Design Drawing and Standards 4

 2.2 Definitions 4

ANNEX A - TECHNICAL EVALUATION CRITERIA FOR PLASTIC BIRD PERCH DIVERTERS
AND RELATED FASTENERS 5

ANNEX B - TECHNICAL EVALUATION CRITERIA FOR PLASTIC BIRD PERCH DIVERTERS
AND RELATED FASTENERS 6

CONTROLLED DISCLOSURE

1. Introduction

Transmission lines faults have been identified as one of the key factors that affect the overall performance of transmission lines. Bird faults are one of the causes that significantly contribute to transmission line faults. Various types of birds use power line structures for perching and nesting purposes. The principle to be followed in perch management is not to prevent birds from roosting on towers, but rather to prevent them from roosting on critical parts of the tower. Improvement of line performance is one the key objectives of the Lines and Servitudes Department hence the main purpose of the plastic bird perch diverters is to reduce bird related faults due to bird streamer and bird pollution.

2. Scope of Work

The scope of work is for supply and delivery of plastic bird perch diverters and stainless-steel straps and any other related material for lines in the Central Grid. Delivery addresses being as follows:

NTCSA Central Grid: Sisimuka Substation. Sisimuka Substation is located in Germiston, Gauteng Province, Off Power Street.

The bird perch diverter should be made of a plastic material that complies with the rapid aging, material composition, pull and drop tests. In addition, they should be 575mm tall and 1m long and have intermediate uprights spaced 80mm apart. They should alternate between tall uprights (500mm) and short uprights of 280mm, on a base of 75mm. The plastic wall thickness should be 2.5mm minimum and made of material that compiles with the material composition requirements as stipulated in the specification referenced in section 2.1 below. They should also not have sharp points that can cause harm to birds or other wildlife.

The fasteners must be made of stainless-steel strap with a quick release mechanism. The dimensions of the stainless straps are 12mm x 0.75mm. The tenderer is required to supply a minimum of 3 x 600mm lengths of strap with each bird perch diverter (refer to 240-147885960 for a detailed device specification).

The table below presents the total quantity of plastic bird perch diverters and stainless-steel straps required.

	NO. OF BIRD PERCH DIVERTERS	NO. OF STEEL STRAPS
TOTAL	10 000	30 000

CONTROLLED DISCLOSURE

2.1 Design Drawing and Standards

Plastic bird perch diverters and stainless-steel straps to be supplied in accordance with the specifications from the attached document below:

Document Name	Document Number
Plastic Bird Perch Diverter and stainless-steel Strap Specification	240-147885960 Rev 2

2.2 Definitions

2.2.1 Disclosure Classification

Controlled Disclosure:

The information is readily available to Eskom employees (internal use). Information may also be accessed by or disclosed to third parties with specific authorisation or consent (either enforced by law or discretionary).

This information includes a wide spectrum of internal business data that can be used by all employees and can be shared with authorised business partners.

Permissions: Read and Modify for the protected content.

CONTROLLED DISCLOSURE

ANNEX A - TECHNICAL EVALUATION CRITERIA FOR PLASTIC BIRD PERCH DIVERTERS AND RELATED FASTENERS

1. Scope

This document covers the criteria for the evaluation of the supply of bird perch diverters and fasteners within Eskom Holdings SOC (Ltd). The document addresses the standard documented technical evaluation criteria to be used when evaluating plastic bird perch diverters and fasteners in line with the Eskom Holdings SOC (Ltd) requirements and it is applicable to all the technical evaluations for the related tender submissions.

2. Requirements

The technical tenders received will be evaluated via a document evaluation (desktop assessment) process.

The evaluation exercise is performed by the appointed Eskom technical team. This initial part of the evaluation starts when submissions are opened and assessed for the first time. The submitted documents will be evaluated against the evaluation criteria as stated in this document.

During the evaluation, all material and mechanical test certificates mentioned in section 3.2 (Plastic Bird Perch Diverter and Stainless Steel Strap Specification, doc no. 240-147885960) must be provided and must comply with the limits specified in Schedules A of the referred specification **before contract can be awarded**. Those tenderers who have test certificates available for section 3.2 can provide these at tender submission stage.

If tenderers do not submit all the required test certificates before tender award, then they will be automatically disqualified.

The evaluations are done to establish whether all the key tender deliverables are met. A minimum total of 70% is required to pass the technical requirements.

Item	Requirements	Documentation	Pass criteria
1	Technical criteria requirements	As per Annex B	70%

Annex A – Schedules A / B for the bird perch diverters and related fasteners on Plastic Bird Perch Diverter and Stainless Steel Strap Specification, doc no. 240-147885960), **must be completed**.

CONTROLLED DISCLOSURE

ANNEX B - TECHNICAL EVALUATION CRITERIA FOR PLASTIC BIRD PERCH DIVERTERS AND RELATED FASTENERS

Table 1: Technical evaluation criteria score sheet

Bird perch diverter technical evaluation criteria				
	Criteria	Clauses from Plastic Bird Perch Diverter and Stainless-Steel Strap Specification (240-147885960)	Scoring weight	Score
1	All dimensional and functional requirements met			
1a	Bird perch diverter spikes/verticals are securely attached/molded to base and not removable - One-piece solid unit- (10) - Smooth finish with no sharp edges- (7.5) - Alternating long and short spikes- (7.5)	Annex B,	25	
1b	Dimensions of bird perch diverter as per drawing and wall thickness indicated to be a minimum of 2.5mm* - Length- 1000mm- (5) - Height- 575mm from bottom to top of spike tip- (5) - Base width-40mm - (4) - Base height- 75mm - (4) - Short spike height from bottom of base to top – min 355mm - (4) - Separation distance between spikes- 80mm - (4). - Wall thickness- 2.5mm - (4).	Annex B	25	
1c	Device is supplied with quick release fasteners	3	10	
1d	Device will not cause harm to birds/wildlife**	3	10	

CONTROLLED DISCLOSURE

3	Bird perch diverter should not accumulate/trap any water. Devices must be self-draining.	3	7.5	
4	Percentage reground material indicated as less than 10%***	3.1	7.5	
5	Additives and UV stabilisers added conform to Section 3 point 11 requirements	3.1	5	
6	Strapping material 304 grade stainless steel indicated on Schedule B in Annex A (4.2 on Schedule).	3.1	2.5	
7	Strapping dimensions minimum 12x0.75mm	3.1	2.5	
8	Quick release fastening method (strap/fastener can be reused during maintenance if required and no special unconventional tools required)	3.1	5	
	Total = /100 (Minimum of 70% required for this section)			
*All dimensions must be within a tolerance of 5mm, except on the material thickness which should be minimum 2.5 and maximum 3.5 mm. **This should be ensured by a design that has no sharp edges or protrusions that can harm or kill birds or other wildlife. This includes the fastening/strapping device. ***Materials which are reground from excess or reject devices after the manufacturing process and then added to the virgin material for a next batch.				

CONTROLLED DISCLOSURE

Table 2: Reference clauses for required tests

	All the required test certificates indicated below, must be supplied before contract award.	Clause
1a	Rapid aging test	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)
1b	Material composition test	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)
1c	Pull test	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)
1d	Drop test	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)
1e	Strength test-Plastic bird perch diverter	3.2 from Plastic Bird Perch Diverter and Stainless Steel Strap Specification (240-147885960)

CONTROLLED DISCLOSURE